Project Design Phase-I

Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID30150
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Abnormal behaviour or activity detection and prevent from drowning.
2.	Idea / Solution description	Our model using CNN algorithm and YOLO algorithm, we can predict drowning people in swimming pool. In specific, we use YOLO algorithm version 7 to get high accuracy results.
3.	Novelty / Uniqueness	Since we use YOLO algorithm version 7 , it takes less time to proceed , compare to other algorithm. The alarm will be triggered immediately right after the detection.
4.	Social Impact / Customer Satisfaction	Yearly 1.2 million people face unplanned death due to drowning globally. This dead rate will be reduced by implementing this solution.
5.	Business Model (Revenue Model)	Hence it is a lifesaving model, it can be used by beginners and irregular swimmers. It alerts near by swimmers who rescue the drowning one.
6.	Scalability of the Solution	YOLO V7 has a great flexibility architecture compare to others. Increase in depth scaling and width scaling and resolution scaling we can increase the scalability of this model. Real-time Object detection of yolo algorithm has high accuracy and fast.